

Remarks

Claims 76-89 stand rejected, and are canceled herein. Claims 1-75 were canceled in previous responses. Claims 90-106 have been added. The Assignee respectfully traverses the rejections and requests allowance of claims 90-106.

New Claims

Claims 90-98 for an access device, and claims 99-106 for a method of facilitating communication between a network and a premises device, are new. Support for these claims is provided in Fig. 3 and paragraphs [0069] through [0094] of the present application.

Claim Rejections Under 35 U.S.C. § 112

Former claims 76-89 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. (Page 2 of the previous Office action of April 25, 2006, hereinafter “the previous Office action.” See also page 2 of the final Office action.) More specifically, the Office action states that “the teaching regarding the access device used at the customer premises is not specific enough to enable a person skilled in the art to make and use the invention.” (Page 2 of the previous Office action.) The Office action then cites several details from the current application at paragraphs [0024]-[0035], which relate specifically to the embodiment of Fig. 1. (Pages 2-4 of the previously Office action.) Further, the final Office action states that “without offering the implementation details (and the best mode teachings) showing how the FPGA, ASIC, DSP and software technologies are combined, a skilled person in the field would not be able to make and use Applicant’s claimed invention.” (Page 7 of the final Office action.)

The Assignee respectfully disagrees with the allegations regarding the written description requirement. The final Office action cites portions of the current specification that discuss the broadest embodiment of Fig. 1. However, Figs. 2 and 3, in conjunction with their attendant explanations provided at paragraphs [0044]-[0094], provide significantly greater detail regarding the various functional blocks of the access device, such as the network interface, service hub, and the central core, which in turn

includes a controller, a specification database, and one or more formatters. References to these same blocks are set forth in many of the claims added in this response. Further, the present specification discusses how each of these particular functional blocks operates under several different examples of employing multiple access technologies, such as receiving communications from a network over an xDSL loop and transmitting those communications to a premises device over a CDMA link. (Paragraphs [0088]-[0090].) Several other detailed examples, each describing the operation of the access device under various conditions, are presented.

Regarding implementation details, the current application specifically indicates that the central core (and not just the access device generally) “may comprise an FPGA, an ASIC, and/or a DSP. One or a combination of the three may be used to provide easily configurable software upgrades, speed in processing, and optimal signal processing that can be reconfigured if needed.” (Paragraph [0048].) Such advantages are provided in part by way of the controller operating in conjunction with the specifications database of Fig. 3, which comprises the specifications for each of the communication standards and protocols supported by the access device, thus making the process of updating and adding support for the various communication protocols possible with minimal impact on the remainder of the design. (See paragraph [0083].) Moreover, as was mentioned in the last response, concepts pertaining to software-defined radio (SDR), which has been employed by the U.S. military to allow the use of a wide variety of radio protocols in real-time, may be employed as well. As a result, the present application, in combination with knowledge readily available at the time of the filing of the application, provides ample guidance regarding the implementation and best mode for the central core to enhance upgradeability, primarily by way of software, to handle new or enhanced access technology standards. (See paragraphs [0016]-[0020].) The remainder of the access device of Fig. 3, such as the formatters, the network interface, and the service hub, provide support for formatting, receiving and transmitting communications employing various wireline and wireless access technologies, such as POTS, DSL, CDMA, and many others. Various implementations of these well-known access technologies were available at the time of filing of the application as well. Thus, the Assignee contends that more specific implementation details regarding the use of FPGAs, ASICs and DSPs in

the central core are not required for one of skill in the art to practice the invention as currently claimed.

Thus, in light of the foregoing, the Assignee contends that claims 90-106 comply with the written description and best mode requirements of 35 U.S.C. § 112, first paragraph, and respectfully requests withdrawal of the 35 U.S.C. § 112 rejection.

Claim Rejection Under 35 U.S.C. § 102

Claims 76-81 and 83-88 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,526,581 to Edson (hereinafter “Edson”). (Page 2 of the final Office action.) Further, claims 82 and 89 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Edson. (Page 4 of the final Office action.)

In response, claims 76-89 are canceled herein, and new claims 90-106 have been added. As a result, the Assignee respectfully contends that the rejection is obviated as a result, and respectfully requests withdrawal of the 35 U.S.C. §§ 102 and 103 rejections.

The Assignee further contends that new claims 90-106 incorporate features not taught or suggested in Edson. For example, Edson does not appear to teach or suggest the use of a central core capable of reformatting incoming communications and transmitting the resulting outgoing communications by way of a number of access technologies, as provided for in claim 90. Instead, Edson employs a number of specialized modems, with each being configured for a specific type of access technology. (See Fig. 2 of Edson, which employs separate modems for cable and ADSL.) Other significant differences between Edson and the claimed subject matter exist as well.

Conclusion

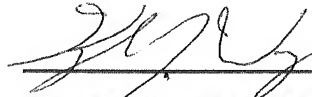
Based on the above remarks, the Assignee submits that claims 90-106 are allowable. Additional reasons in support of patentability exist, but such reasons are omitted in the interests of clarity and brevity. The Assignee thus respectfully requests allowance of claims 90-106.

The Assignee hereby authorizes the Office to charge Deposit Account No. 21-0765 the appropriate fee under 37 C.F.R. § 1.17(e) for the request for continued examination (37 C.F.R. § 1.114(a)), as well as the fee under 37 C.F.R. § 1.17(a)(1) for

the one-month extension of time requested under 37 C.F.R. § 1.136(a). The Assignee believes no additional fees are due with respect to this filing. However, should the Office determine additional fees are necessary, the Office is hereby authorized to charge Deposit Account No. 21-0765 accordingly.

Respectfully submitted,

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SIGNATURE OF PRACTITIONER

Kyle J. Way, Reg. No. 45,549

Setter Roche LLP

Telephone: (720) 562-2280

E-mail: kyle@setterroche.com

Correspondence address:

CUSTOMER NO. 28004

Attn: Melissa A. Jobe

Sprint Law Department

6450 Sprint Parkway

Mailstop: KSOPHN0312-3A461

Overland Park, KS 66251